to branch lines must be marked to indicate the related space served.

(i) If the space or enclosure containing the carbon dioxide supply or controls is to be locked, a key to the space or enclosure shall be in a breakglass-type box conspicuously located adjacent to the opening.

[CGFR 65-50, 30 FR 17001, Dec. 30, 1965, as amended by CGD 74-100B, 40 FR 6209, Feb. 10, 1975; USCG-1999-6216, 64 FR 53226, Oct. 1, 1999]

§ 95.15–15 Piping.

- (a) The piping, valves, and fittings shall have a bursting pressure of not less than 6,000 pounds per square inch.
- (b) All piping, in nominal sizes not over ¾ inch shall be at least Schedule 40 (standard weight) and in nominal sizes over ¾ inch, shall be at least Schedule 80 (extra heavy).
- (c) All piping, valves, and fittings of ferrous materials shall be protected inside and outside against corrosion unless specifically approved otherwise by the Commandant.
- (d) A pressure relief valve or equivalent set to relieve between 2,400 and 2,800 pounds per square inch shall be installed in the distributing manifold or such other location as to protect the piping in the event that all branch line shut-off valves are closed.
- (e) All dead-end lines shall extend at least 2 inches beyond the last orifice and shall be closed with cap or plug.
- (f) All piping, valves, and fittings shall be securely supported, and where necessary, protected against injury.
- (g) Drains and dirt traps shall be fitted where necessary to prevent the accumulation of dirt or moisture. Drains and dirt traps shall be located in accessible locations where possible.
- (h) Piping shall be used for no other purpose except that it may be incorporated with the fire-detecting system.
- (i) Piping passing through living quarters shall not be fitted with drains or other openings within such spaces.
- (j) Installation test requirements are:
- (1) Upon completion of the piping installation, and before the cylinders are connected, a pressure test shall be applied as set forth in this paragraph. Only carbon dioxide or other inert gas shall be used for this test.
- (2) The piping from the cylinders to the stop valves in the manifold shall be

subjected to a pressure of 1,000 pounds per square inch. With no additional gas being introduced to the system, it shall be demonstrated that the leakage of the system is such as not to permit a pressure drop of more than 150 pounds per square inch per minute for a 2-minute period.

- (3) The individual branch lines to the various spaces protected shall be subjected to a test similar to that described in the preceding paragraph with the exception that the pressure used shall be 600 pounds per square inch in lieu of 1,000 pounds per square inch. For the purpose of this test, the distribution piping shall be capped within the space protected at the first joint ahead of the nozzles.
- (4) In lieu of the tests prescribed in paragraphs (j) (1) through (3) of this section, small independent systems protecting spaces such as emergency generator rooms, lamp lockers, etc., may be tested by blowing out the piping with air at a pressure of at least 100 pounds per square inch.

§ 95.15-20 Carbon dioxide storage.

- (a) Except as provided in paragraph (b) of this section, the cylinders shall be located outside the spaces protected, and shall not be located in any space that might be cut off or made inaccessible in the event of a fire in any of the spaces protected.
- (b) Systems of the type indicated in §95.15–5(d), consisting of not more than 300 pounds of carbon dioxide, may have the cylinders located within the space protected. If the cylinder stowage is within the space protected, the system shall be arranged in an approved manner to be automatically operated by a heat actuator within the space in addition to the regular remote and local controls.
- (c) The space containing the cylinders shall be properly ventilated and designed to preclude an anticipated ambient temperature in excess of 130 degrees F.
- (d) Cylinders shall be securely fastened and supported, and where necessary, protected against injury.
- (e) Cylinders shall be so mounted as to be readily accessible and capable of